

A-Q
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Mrs. Syer

IN ACCOUNT WITH

Chas. H. Schoulen

DEALER IN

CHOICE BEEF,

MUTTON, LAMB, VEAL, PORK,

Hams, Bacon, Corned Beef,

TONGUES, ETC.

—:O:—

POULTRY & GAME

IN SEASON.

—:O:—

Goods Promptly Delivered, Free of Expense.

~~Antennae 11-segmented
Eyes prominent & close to base of
antennae. Body slender, slightly tapering. Coloration green.
The legs colorless, eye black and
small. The shadow of the antennae
well marked. Some yellow caste. ✓
The imago greenish, all black.~~

Schizocerus n. sp.

Schizocerus n. sp.

Sawfly A

Feb-12 1893

Sawfly on bean *Hosackia grandiflora*
larva June 1891. Hd 1 mm wide
under than high, mouth pointed. Clear
green, shaded with black across the
middle, ocelli black, mouth brownish.
The feet large, abd. small present
on 5-10 & 13. A slight S-V ridge
body then creased & covered with
round smooth conical warts like
elevations. Uniform green, the anal
appearing darker; a stigmatal
row of black dots. The anal plate
terminates in 4 pointed blunt projections
tipped with black, there are 2 other
along the anus. The feet dusky.
The larva is small, length about 10 mm
another anal plate black
cocoon found on the back of a leaf
flat, rounded, symmetrical of
yellowish silk of loose and fluffy

S^{OUT} 7 B

V

On fern (Pteris) ^{aquilina} Portland Or. June 1892
Hd round, pale, whitish with a faint
blackish mottled line from above eye to
vertex: eye large, round, black. ^{solid} ~~gang~~
dark brown. Body, the feet large, bent
outward, abd on 6-12 & 13 feet; thickly
annulated, 6 per seg, skin translucent
green with a white sd line running
whole length, nearly joining at ends
Spinach small, black, joined by
a thread like white line being the
tracheae showing by transparency
L 20 mm: w. hd about 1.5 mm.

June 16 turned red & lived in rotten wood

Oct May 21, 1893 (Roxbury Mass)

Strongylogaster longulus
Pacific

OUT

C

On gooseberry (*Vernatus ribesii*?) Reeking
May 30, 1893 mature? Hd wide than
high (1.4 mm) rounded above, flat below
shiny black, yellow about the mouth
covered with inconspicuous short stiff

hairs. Abd. feet on 6-11 & 13. Body blue
green, yellow on 2, 12 & 13 post. The
feet black ^{as base & tip}. On each seg. 3 transverse

rows of large ^{shining} elevated black spots
each bearing a short stiff black seta

centrally & the following arrangement —

Ant. row of 3 spots, middle of 4,

post of 4, but irregular & extremely

lower down than the middle row;

A large lateral spot bears 5 setae;

2, contiguous above base of leg, bearing

several setae, minute black dots on

legs. venter immaculate

One shed (sh hd 1.5) splitting the head

Calc. .51 .73 1.0 1.5 rad .7

Found I II III IV V

as a pupation (of moth) and came out
without any black spots & immediately
entered the ground. Description of it. (?)

without any elevated black spots. ^{but minute pilose} ant.
no setae. Hd green, eye black w 1.5

Body light green, marked with
yellowish on 2 & 12 & 13. Abd. feet ^{6-11, 13} present

(Another hd 1.8 shed, new hd 1.8. The head
came out of the old one & moved from the neck

Imago June 11 ♂♂ & ♀♀

Second brood June 30 Eggs cylindrical, rounded
at the ends, straight or slightly curved

very shiny translucent white, soft,

much like skin on shell. Skins

collapse after larva hatches.

L. 1.2 mm. width 6 mm. Larva length

like along the rib of a leaf on

the under side in rows at varying

distances for contiguous. In saw cuts
(cont after F)

OUT/

D

Sawflies on poplar, Roxbury June 4
 Hd smooth shiny black, a little pale
 around the mouth or pale testaceous
 with black eyes. w 1.3 mm body green,
 slightly shiny, annulate, abd feet
 on 6-11 & 13, but very small on 13
 2 trans. rows of elevated black spots, ^{peas}
 minute on the back, caudal lateral
 and larger, especially 2 sub-ventral
 rows. Color leaf green, darker along
 the back, 12 tinged with yellowish
 the feet greenish or tinged with
 black at base. → Spots obsolete post
 On shed (light) & disappeared. Spots gone.

flies before Apr 13, 1894

Form most dark brown rail cocoon
 that on ♀ larger than ♂, in ground

vernatus monochroma

Perichlita
 subtruncata ^{now} EA

Out March 23
 1897

On young black oak Van Cortlandt
 Park, N. Y. May 9 1896.

Hd .6 mm Pale brown dotted or green
 green, a black patch in ♂ eye
 antennae black. Body light
 yellowish green, d. vessel dark
 green, Y-spine paler except the
 thoracic ones which are black
 tipped. Feet 6-12 13. Thoracic
 scarcely visible above, clean with
 smoky tips.

May 9 Hd .9 Patch on ♂ brown
 Body green, d. vessel less con-
 trasting.

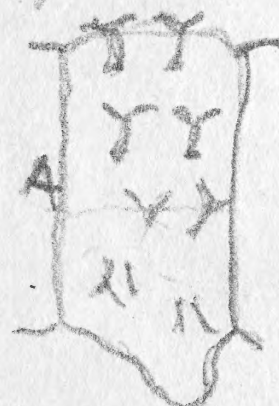
Worm made 11 Hd 1.1 green, ♂ brownish
 eye black, mouth brown. Body rather
 opaque green, a little whitish d.
 from diffuse fat, d. vessel darker
 green. Y spine whitish dark tipped
 2-3, faintly on 14

May 14 shiny jacket (sh. hds 1-1) smooth
 waxy greenish, eye black mouth brown
 shiny indistinct annulate, d. vessel green

E (1896)

On oak of black oak Van Cotenudt
Park May 18 1896

Hd same exactly as E, w. $1.3 \pm$ mm &
length $12\frac{1}{2}$ mm. Feet 6-12, 13 are
spines not black tipped anywhere.



but a little dusky at the
ends of body esp on 13.
No anures. scarcely at all
annulate.

may be sunny jacket. Like E but greenish
also eye black. Center of body more
yellowish than ends.

Ant of Apr 11, 1897 Urophadma

Another on black oak Bellman Wana up
May 18 1897 Spine all pale. Spine same
no single spine behind the spi-
acle as in 7BA. Hd $7\pm$



may be Hd 1.2 Shade of green vells
patch is a single transverse. Body
green spine all pale, same. may be patch
is a double. Spine behind spiracle
present, indistinct $\frac{1}{2}$ in obj through small



another Bellman 2. June 3 1897. Black
on head strong but in front. Bands
up from edge. Twin spot in D. Spine
all pale, one behind spiracle evident
to lens.

form a cell in
round line with
black secretion

OUT

E

Membran bipartita

July Apr 13 1898

On black oak, Forest Hills. June 4, 1893

Hd wider than high; round above smooth
green, eye black with a blackish spot
from end to vertex; 2 contiguous

black spots on upper part of clypeus
Feet on 6-11 & 13. Body smooth, not
annulate, S-V region folded. Uniform

green with 2 transverse rows per
seg. of processes, Y-shaped (Y) in a
longitudinal plane. They are ① vent

dorsal, 2; ② dorsal 2; ③ S-S 1; ④ ⑤
S-V, small, 1 each, not in line.

Sit on the back of a young leaf singly
and eat holes flat ways. w. hd $1.4?$

Length 12 mm Ant 8 sp. Spine are
black tipped. Mould smooth, annulate

with slightly elevated concolorous warts.
In place of processes, inconspicuous. Feet 6-12,

13-14, Pale greenish concolorous, head pale testaceous

W. L. L.

more on white oak Pelham Park May 22. Darker, more uniform in some S-F region and a little lighter not contrasting. Points vary in distinctness. FA-F 1893

On white oak, Franklin Park June 4
Singly, on the end of a litters out
midrib of ~~leaf~~ like a young *Liriodendron*.

Hd round, flat in front, about as high
as wide & slightly narrowed below, smooth
shiny black; w. 1.3 mm. Abd feet on
6-12, (small on 11 & 12) and 13 post.

smooth annulate (3 per seg) with increased
trace of setae as obscure dots and the
lens. Uniform olivaceous blackish,
above grayish white laterally &
ventrally; the feet black. In some
a blackish line along base of segs.
Another had a dead cherry stone
colored head, was all dull reddish
whitish with an olivaceous blackish
broken superstigmatal blend
Curl then first segments around the
berch and reach out with all the
thoracic feet in the air

The feet pale, black at base. A little bloom on head.
May 23. 2 to 5 same shiny waxy. No feet heads seen
no points. Hd dusky black pale on face. Abd waxy
speckled a black lat shade from diffuse olive
the sides, slightly head F went in

ground Out March 27 1898 *Henrichia patnalis*

On white oak Pelham Bay Park May 18 1897
Singly but several in same tree each on perch
of tip of midrib from which rest of leaf
eaten off. Hd on 1 by thoracic feet and black.

Hd 4 rounded dull dusky, eye black. Body annulate
dull reddish grayish green with short black
points, uniform. A dark line at base the feet
Hd 6 solid whitish gray post, eye black.

Body slate gray, whitish below spiracles as
in next stage.

Hd 1 on leader black, small. Segs 6 annulate
black point on 2^d and 4th. Body slaty gray,
more or less whitish S-V below spiracles, a
dusky shade along S-V folds. The feet
largely black abd small 6-12, 13. White
waxy grayish white. (Hd 1.4)

May 19 Hd 1.4 Solid leader, 5 and back of head
near black antennae, eye black. Dorsum leader
black annulate head plain just dorsally
except in measures, below spiracles near white
the S-V folds marked in blackish forming
a double row of dashes. The feet largely
black abd pale. Segs 6 annulate black
points on 2^d and 4th small. Grow rapidly
much. Later more greenish, dorsum greenish gray
pale down at first. May 21 Hd 1.6 Black,
feet pale & grayish, or light fleshy brown. Body
solid gray greenish, whitish S-V, a lateral
leader gray shade found leading, sty line greenish
red, & dark, under a S-V fold point

C (cont)

Stage I Hd large, round, ^{as} wide ^{as} high. Translucent shiny white ^{mouth brown} eyes black, w. 5 mm (full) Body large slender, compressed & covered with very minute short pile, all entirely translucent white. Late the green foot contained in the alimentary canal shows by transparency. Length 2 1/2 mm before ecdysis. The larva reaches out along back of leaf & to rib with thin hind feet near edge of shell & into bubble through the opening the beginning of the circular holes in the edges of which they sit. These holes become confluent as reach edge of leaf when the larvae sit on the edge to maturity. Late the head turns blackish & the thor. feet and S-S elevation are shaded with black. W. hd still .5 mm. Holes about 4 mm in diam.

Anal prolegs slender, black.

One hd .7 mm Stage II. Sh. hd. seen by thin split like pupation of moth but apparently about .5 mm wide. Hd blackish, pale around mouth; mouth dark, shiny with short pile. Body abt 6-11, 13. Thor. feet large, marked with black. Body translucent, but green by food, the food absent & a slight yellowish tinge on 2 & 12. 2 trans. rows per seg. of elated black dots each bearing a short stiff seta. S-S a series of large dots, one per seg. & 2 smaller ones below. Line of spiracles indicated by a white cord seen by transparency. The large mouth bears several setae. Another hd 1.0 Stage III Hd shiny black, a little pale around mouth & clypeus covered with short stiff setae. Thor. legs black with translucent white marks. Anal Plate & prolegs

black. Large elevated smooth
black setiferous tubercles. Setae
black, short stiff. 2, 12 & 13 feet
yellowish, the rest of the body whitish
appearing green from food. Arrangement
of tubercles & structure as in next
stage. Length about 8 mm.

In the egg the larva lies up on its
back, folded up double ~~or~~ or
normally, the other side up, the head
at one end of the egg. They appear
to bite a little at the skin &
pinfold lying there.*

Even just after molting before the
black has come the larvae are
green & between 2 & 12 where
food is not all cast out or well
colored there? Looks like food

* They try to uncurl and break the
skin at the back and writhe
out

^G ^{OUT}
Sawflies on rose, pushing the top side
all over & sitting flat on venter.
No higher than wide rounded, 0 wide
through eyes. Pale brown, not shiny
Eyes & mouth black. Width 1 mm.
Also feet 6 - (8 pair) (not on 13 ant.)
The feet not large. Sawflies sub-
transparent yellowish, broad of green
d. from food, annulate, not shiny
without marks. Nodes are very
slight inconspicuous pointed elevations
represent the usual dots. These
are faintly blackish toward extremities.
Another (shed?) same but no green. All
pale honey yellow ^{almost whitish} Hd 1.0 mm. Ali-
mentary canal first. Shows blackish
at sh hd 1.0 Perfectly smooth

1.1 { Another Hd 1.0, sh hd 1.0.
Perfectly smooth a yellow
imagos of 28th diet annulate, 6 ft seg.
Univertegia rosae Han

OUT

H

See E. ...

cinetiformis

Sawfly on rose, eating whole leaf
 at the edge, rest curled apically
 on the back, tail on top. Hd
 well rounded, flat on chylens, pale
 brown, eye large, black, mouth
 blackish. Ant. chry. of blackish
 smooth, stripe on the summit of
 head longitudinal, d, but short.

(shld 1.5)

W. 1.2 mm Body feet 6-12, 13 post

Ths. feet large, seen from dorsal
 view speedily, but not markedly
 so. Green ^{thin spots along bases of legs} darker
 whitish, subtransverse s-v & v

and a feet. Minute white pointed
 conical dots on the green part
 arranged in 3 trans. rows per seg.

on the 1, 2, 6 & annulets (6 in seg)
 annulets (has 2 each side) s-d

" 2 annulets have 2 s-d, 1 2 lat

* i.e. a large round black spot with a
 single cell in the center of it

These dots also occur s-s but
 are very inconspicuous on the pale
 ground color below the white
 cord of the tracheae showing by
 transparency. The green color
 becomes darker post. i.e. is inter-
 rupted at 12, showing that it is
 partly due to the food in alimentary canal.
 Anched & entered ground. Hd shiny
 slightly punctured. Pal straw yellow
 with large ^{black} eye spot. W 1.5 mm Body
 smooth, 6-annulets without any
 tubercles at all, colored as before
 B. color bluish green esp on 2 (int pale)
 Later black shade on venter of hd
 & d. color dark green; but hd is shiny
 paler than before & there are
 no white dots on the body.

Forms all in ground with no silk. walls not consistent

Imago July 31, 1893 Empilex cinetiformis

Jackman pond 45 ft up
 5 ref 1485 c 1887

Calc .48
 Found .5

.67 .88 1.16 1.52 2.0 wt .76
 .7 .9 1.2 1.5 2.0

Large sandy, mud-hole, mass
 July 2, 193. Ho about as high as
 wide, full of water, glass - pond
 with a dept. like depression center
 and a row of 4 transverse large
 punctures below it. No trace of
 lobes to head, the ventral center of
 outline from before almost circular
 being only slightly quadrangular
 Entire shiny black. w. 1.5 mm
 Legs 6-11, 13, body curled over back
 thorax 3-shaped. Sit in this. feet
 as a needle (leg). 3 large annulet
 above trace of oth. smaller ones
 per seg. smooth below. Thin
 of trachea by transparency.
 Tho feet shiny black with a
 greenish central band & black
 dots. Body white green, and

very translucent & only slight
 shiny, apparently unmarked
 but under lens show many minute
 elevated dots, arranged in single
 transverse rows on the 2 first
 annulets & on the short lateral
 (trans.) fold which alternate with
 these annulets. Not in true ag-
 gromerated patches S-V, the upper
 ant. (S-S), the lower feet, on 2
 slight elevation of the skin.
 Found also the dead shoot when the
 legs had been punched, causing its death
 other lvs 2.0 Ho same shape, but dif-
 ferent sculptured in front & less shiny
 Shy as faint well marked with
 3 vertical grooves, somewhat with a
 depression on each side of it and
 one above. Body as before but the

Calc .18 .25 .35 .5 .7 70
 Found .25 .35 .5 .7 .7

but it is not a slug and walks with its feet normally.

First stage .25 - horn
 Same eye, mouth pale
 apparently laid from above black lines a group 1.5 mm
 Egg in circular areas, cut out pale below
 pictures on under side. Areas about

1.2 mm in diam. Laid near top
 of leaf. 2 mm in diam
 most near them. (Instances one had .5
 with a .35th on leaf, the other .135)
 16

July 11 inst 8 8.5.7 7.7.7 Hd as before
 but pale whitish yellow, color of honey
 caramels, eye black, body not shiny,
 scarcely more than translucent, same
 whitish yellow color, rounded with
 on sides. enlarged this, segs 5 with 2 d
 transverse white, dorsal seg on 5 a foot, the
 and short, feet reaching to 1, representing the
 normally tuberculated annulets. (inst 10)

717 5 mm long, 1 mm wide
 K 7/12 6th inst.

White Birch S-f, Woodhall, July 5 1893
 I could find no more well developed

Images July 25 at. Sep 1893
 In ground from an oval
 cell formed of group of
 earth cemented together
 by a brown secretion
 which lines the inside
 of the cavity. Prothorax
 head but little.

Paper closely resembling the
 machine insect except
 that the wings are
 rudimentary and the
 color is uniform yellowish
 white, the eyes black

Monstegia green-alba not perfect
 flew to the ground
 heavily shaded
 with greenish black, the

inst; flat
 feet
 of shiny
 tubercles
 smooth
 color
 large
 head
 approx-
 at the
 get the
 a body
 tail

Cule
found

larva appearing in 2 and 4 on abd.
legs, and symmetrically.

Next stage Hd 2.2 same but smooth.
smaller distinguishable 2, then
d a stig irregular bands a abd feet
honey yellow, leaving the black
black, most distinct s-d and
submarginally, forming a series of
small black s-d patches or spots
w light on the body. is shiny black
July 11. Empty intestine like that seen
in 1 collected ground. on ship stem seen
from beneath ground, elliptical
to oval, black, opaque, black, 11x4 1/2

Cule... 37 .53 .75 1.08 1.54 2.2 wts 70
found .4 .55 .75 1.05 1.6 2.2

Stage 4 July 11/93 Gracens latitans

.37 .42 .56 .76 L 1.0 1.4 1.9 wts .74
.37 .4 .55 .75 L 1.1 1.4 1.6 -7

Older samples, Woodstock, July 8, 1893

K.

Eggs on white birch July 4, 1893
Laid closely along the trunk
on the under side about 1/2
enclosed in central cuts which
they have swelled out so that
the egg bunch obliquely

soft translucent
white 1.4 x .6 mm (sh. 1/2) Stage hd .4 w. 45 eating holes

confluent in leaf web forming
a lashing body. Hd round
a little higher than wide, full
at vertex, shining black
body light shiny greenish
tubercles very scarce, not
set off, only the s-v distinct
those very inconspicuous with
body, large, rounded, like seg.

and are large, unmarked sub-
marginally in the black patches

Cole
Found

| | | | | | | | | |
|-----|-----|-----|-----|---|-----|-----|-----|--------|
| .31 | .42 | .56 | .76 | L | 1.0 | 1.4 | 1.9 | wt .74 |
| .3 | .4 | .55 | .75 | L | 1.1 | 1.4 | 1.9 | .7 |

Ch. S. G. H. H. Woodstock, Aug. 8, 1893.

On black birch, Jefferson Highlands
41. H. June 26 1893. Well grown.

logically appearing in 2 and 3 on abd.
legs. a Th. of blackish segs.
next etc obscurely annulate. The
abdomen also abnormally canal gives a
d & st green shade
Aug 5 Hds. .55 (Sh. has in can) very smooth even
brownish black, pale above
mouth Body olive green, the
s-v ridge and feet blackish
Body shining, annulate,
underneath; an ante-seen.
July 11 & molt Aug 7 (Sh. hd. .75, new hd 1.05)
the 1 ant. 1st black, the 2nd black except at
the base of joint and same.
[Aug 7 found plenty of both .55 and .75
sh. has in the can, but could not
demonstrate any 4. do they have
the stage?]]

Craesus latitarsus Norton

Cule..

Found .4 .55 .75 1.05 1.6 2.2

Image Aug 1 1893 Craesus latitarsus

On some large, ...
centrally in the black spots.

Cole
found

yellow appearing on 2 and 4 on abd.
legs. a

next the *mechos* before Aug 13 1893

Hemichysa *vesicosa* 1/2

d a 1/2 corn beneath group, the web,
brown with no distinct
threads crusty, little
elliptical 8 x 4 mm.

subst. like fly, but wings

richmentary all brown

yellow the legs curved

antennae dense. Eyes

blackish.

Heinghwa americana

Thor

alba *serulata*

Cole...

Found 4 no. 40 no. 100 no. 200

Aug 1, 1893 *Graculus latitatus*

.34 .42 .56 .76 L 1.0 1.4 1.9 2.14
.34 .4 .55 .75 L 1.1 1.4 1.4-7

Alba 5 samples, measured, Aug. 8, 1893

in cavities on petiole & base of

stem, lateral but opening below, on one

or both sides of stem, nearly continuous

along base in the leaf, between ribs

when large. (See black)

stage 1.4 well attended, slightly

in water, and conspicuously flattened

before, showing black, of oval, split

the part spreading black, 1st 1st point

1st-1st on 6-12, 13-14. Body smooth

unmarked, creased, not shiny

subventral greenish other smooth

even continuous black lateral lines

and greenish interior. 1st 3-1 1st.

2 than 1st of smooth inconspicuous

conspicuous setiferous hairs

moderate size, arranged sub-

ventrally in the black spots

Calc. .24 .34 .48 .69 .98 1.4 2.0 range
 Found .25 .33 .5 .7 1.0 1.4 2.0
 Also on *Prunella caroliniana* M OUT
Prunella caroliniana N.H.

Sugarplum sawfly on *Amelanchier cana-*
densis, Woods Hole, Mass., July 8/1893

perforating the leaves in small, rather
 flat holes on the under side.

Stage hd 1 mm, rounded, smooth. Shiny,
 greenish. Antennae eye black, mouth
 brown, projecting, not at all retracted.

Thorax a little enlarged, the feet
 spreading widely, not concealed,
 abd. slightly tapered, post. gradually
 from the thorax. Feet 6-11, 13. Segs

4 annulate, smooth, without
 tubercles, not shining. Of a pale

clean green, the abdominal cercal
 showing dark green. The feet
 greenish watery. abd feet 1 and 2

concolorous. Anal plate rounded.

Stage 1.5 Same, but feet 3-11 the upper

Same at Mattabam, N.Y. Sept 1. Same, hd 2.0
 but both hd & body slightly white bloom
 obscuring surface of body.

the head almost whitish. 2 is small

bristly on the head prominently,
 hd 1.5, 1.6, 1.9, 1.0, 2.0, 1.4, 5, 7, 11.0, 1.5, 5

Stage 2 hd 2.0 light testaceous, shining,
 antennae, eye black, shining, mouth brown, not
 projecting, not at all retracted. Feet 6-11, 13. Segs
 4 annulate, smooth, without tubercles, not shining.

Stage 3 hd 1.4 same as 2 but 5 to 10

Stage 4 hd 2.0 same as 3, but 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Stage 5 hd 2.0 same as 4, but 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Stage 6 hd 2.0 same as 5, but 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Stage 7 hd 2.0 same as 6, but 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Stage 8 hd 2.0 same as 7, but 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Stage 9 hd 2.0 same as 8, but 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Nematodes thoracicus

1892

96 Let them work to
their hearts content
but not at all cost

6-10, 10-12, 12-14, 14-16, 16-18, 18-20, 20-22, 22-24, 24-26, 26-28, 28-30, 30-32, 32-34, 34-36, 36-38, 38-40, 40-42, 42-44, 44-46, 46-48, 48-50, 50-52, 52-54, 54-56, 56-58, 58-60, 60-62, 62-64, 64-66, 66-68, 68-70, 70-72, 72-74, 74-76, 76-78, 78-80, 80-82, 82-84, 84-86, 86-88, 88-90, 90-92, 92-94, 94-96, 96-98, 98-100, 100-102, 102-104, 104-106, 106-108, 108-110, 110-112, 112-114, 114-116, 116-118, 118-120, 120-122, 122-124, 124-126, 126-128, 128-130, 130-132, 132-134, 134-136, 136-138, 138-140, 140-142, 142-144, 144-146, 146-148, 148-150, 150-152, 152-154, 154-156, 156-158, 158-160, 160-162, 162-164, 164-166, 166-168, 168-170, 170-172, 172-174, 174-176, 176-178, 178-180, 180-182, 182-184, 184-186, 186-188, 188-190, 190-192, 192-194, 194-196, 196-198, 198-200, 200-202, 202-204, 204-206, 206-208, 208-210, 210-212, 212-214, 214-216, 216-218, 218-220, 220-222, 222-224, 224-226, 226-228, 228-230, 230-232, 232-234, 234-236, 236-238, 238-240, 240-242, 242-244, 244-246, 246-248, 248-250, 250-252, 252-254, 254-256, 256-258, 258-260, 260-262, 262-264, 264-266, 266-268, 268-270, 270-272, 272-274, 274-276, 276-278, 278-280, 280-282, 282-284, 284-286, 286-288, 288-290, 290-292, 292-294, 294-296, 296-298, 298-300, 300-302, 302-304, 304-306, 306-308, 308-310, 310-312, 312-314, 314-316, 316-318, 318-320, 320-322, 322-324, 324-326, 326-328, 328-330, 330-332, 332-334, 334-336, 336-338, 338-340, 340-342, 342-344, 344-346, 346-348, 348-350, 350-352, 352-354, 354-356, 356-358, 358-360, 360-362, 362-364, 364-366, 366-368, 368-370, 370-372, 372-374, 374-376, 376-378, 378-380, 380-382, 382-384, 384-386, 386-388, 388-390, 390-392, 392-394, 394-396, 396-398, 398-400, 400-402, 402-404, 404-406, 406-408, 408-410, 410-412, 412-414, 414-416, 416-418, 418-420, 420-422, 422-424, 424-426, 426-428, 428-430, 430-432, 432-434, 434-436, 436-438, 438-440, 440-442, 442-444, 444-446, 446-448, 448-450, 450-452, 452-454, 454-456, 456-458, 458-460, 460-462, 462-464, 464-466, 466-468, 468-470, 470-472, 472-474, 474-476, 476-478, 478-480, 480-482, 482-484, 484-486, 486-488, 488-490, 490-492, 492-494, 494-496, 496-498, 498-500, 500-502, 502-504, 504-506, 506-508, 508-510, 510-512, 512-514, 514-516, 516-518, 518-520, 520-522, 522-524, 524-526, 526-528, 528-530, 530-532, 532-534, 534-536, 536-538, 538-540, 540-542, 542-544, 544-546, 546-548, 548-550, 550-552, 552-554, 554-556, 556-558, 558-560, 560-562, 562-564, 564-566, 566-568, 568-570, 570-572, 572-574, 574-576, 576-578, 578-580, 580-582, 582-584, 584-586, 586-588, 588-590, 590-592, 592-594, 594-596, 596-598, 598-600, 600-602, 602-604, 604-606, 606-608, 608-610, 610-612, 612-614, 614-616, 616-618, 618-620, 620-622, 622-624, 624-626, 626-628, 628-630, 630-632, 632-634, 634-636, 636-638, 638-640, 640-642, 642-644, 644-646, 646-648, 648-650, 650-652, 652-654, 654-656, 656-658, 658-660, 660-662, 662-664, 664-666, 666-668, 668-670, 670-672, 672-674, 674-676, 676-678, 678-680, 680-682, 682-684, 684-686, 686-688, 688-690, 690-692, 692-694, 694-696, 696-698, 698-700, 700-702, 702-704, 704-706, 706-708, 708-710, 710-712, 712-714, 714-716, 716-718, 718-720, 720-722, 722-724, 724-726, 726-728, 728-730, 730-732, 732-734, 734-736, 736-738, 738-740, 740-742, 742-744, 744-746, 746-748, 748-750, 750-752, 752-754, 754-756, 756-758, 758-760, 760-762, 762-764, 764-766, 766-768, 768-770, 770-772, 772-774, 774-776, 776-778, 778-780, 780-782, 782-784, 784-786, 786-788, 788-790, 790-792, 792-794, 794-796, 796-798, 798-800, 800-802, 802-804, 804-806, 806-808, 808-810, 810-812, 812-814, 814-816, 816-818, 818-820, 820-822, 822-824, 824-826, 826-828, 828-830, 830-832, 832-834, 834-836, 836-838, 838-840, 840-842, 842-844, 844-846, 846-848, 848-850, 850-852, 852-854, 854-856, 856-858, 858-860, 860-862, 862-864, 864-866, 866-868, 868-870, 870-872, 872-874, 874-876, 876-878, 878-880, 880-882, 882-884, 884-886, 886-888, 888-890, 890-892, 892-894, 894-896, 896-898, 898-900, 900-902, 902-904, 904-906, 906-908, 908-910, 910-912, 912-914, 914-916, 916-918, 918-920, 920-922, 922-924, 924-926, 926-928, 928-930, 930-932, 932-934, 934-936, 936-938, 9

(beak's going out)

| | | | | | | | |
|-------|----|-----|-----|-----|------|-----|------|
| Calc. | 30 | .43 | .62 | .88 | 1.26 | 1.8 | 2.70 |
| Found | | .45 | .65 | .9 | 1.25 | 1.8 | |

Q. 10. Aug 5, 1893

~~Stage hd .9*mm hd round,
shiny, very black. Body shiny,
coarsely glabrous annulate, annuli
with annule setae seen with
lens. Uniform slightly brownish
yellow without marks, but
thor. feet marked with black
at base and tip and a series
of large obscure patches
basally on 6-10~~

Stage hd 1.25 Flat before with
ch, red dents; shiny black
sps shiny 4-6 units to notes
w/ very slight showing

The check is made before calculating ^{temperatures}
Since given July 25, 1893 Xerxiatus conylus

N

July 2nd

concolorous bases. ^{head} ~~green~~, shaded with blackish
s-d and on s-v ridge. Venter
blackish with evanescent
glands as in mature larva
abd feet 6-11, 13 post.

Egg in central confluent
incision along back of
midrib, the egg appearing
to have swollen and then
out and been slightly altered
mating they were so close
~~They~~ They may have been
.9 x .7 mm, could hardly
have been more.

OUT

Thrusting glands
6-10, 10 post. 11-13
feet, blackish

(beak) ~~not~~ out

II

Plattsburgh N.Y., Aug 31, 1893. On patula
hazel a sh hd. .5 mm, black.
Larva stage hd. .65 shiny blackish
ish, rounded, eye black mouth
a little pale. Body shiny,
unmarked, whitish, the al.
anal giving a distinct light
green shade. The feet
longer black a row of
blackish spot along
s-v ridge a pair of black
anal conical points
abd feet 6-11, 13. no tubercles
Ommatidium ment gave .45. It
was rather badly spread.

Aug 25, 1893 Crassus laticulus
Peripatus carolinus

yes

William Marshall, Grand Old Man of the Law

1854



5-10, 10-15, 15-20, 20-25, 25-30, 30-35, 35-40, 40-45, 45-50, 50-55, 55-60, 60-65, 65-70, 70-75, 75-80, 80-85, 85-90, 90-95, 95-100, 100-105, 105-110, 110-115, 115-120, 120-125, 125-130, 130-135, 135-140, 140-145, 145-150, 150-155, 155-160, 160-165, 165-170, 170-175, 175-180, 180-185, 185-190, 190-195, 195-200, 200-205, 205-210, 210-215, 215-220, 220-225, 225-230, 230-235, 235-240, 240-245, 245-250, 250-255, 255-260, 260-265, 265-270, 270-275, 275-280, 280-285, 285-290, 290-295, 295-300, 300-305, 305-310, 310-315, 315-320, 320-325, 325-330, 330-335, 335-340, 340-345, 345-350, 350-355, 355-360, 360-365, 365-370, 370-375, 375-380, 380-385, 385-390, 390-395, 395-400, 400-405, 405-410, 410-415, 415-420, 420-425, 425-430, 430-435, 435-440, 440-445, 445-450, 450-455, 455-460, 460-465, 465-470, 470-475, 475-480, 480-485, 485-490, 490-495, 495-500, 500-505, 505-510, 510-515, 515-520, 520-525, 525-530, 530-535, 535-540, 540-545, 545-550, 550-555, 555-560, 560-565, 565-570, 570-575, 575-580, 580-585, 585-590, 590-595, 595-600, 600-605, 605-610, 610-615, 615-620, 620-625, 625-630, 630-635, 635-640, 640-645, 645-650, 650-655, 655-660, 660-665, 665-670, 670-675, 675-680, 680-685, 685-690, 690-695, 695-700, 700-705, 705-710, 710-715, 715-720, 720-725, 725-730, 730-735, 735-740, 740-745, 745-750, 750-755, 755-760, 760-765, 765-770, 770-775, 775-780, 780-785, 785-790, 790-795, 795-800, 800-805, 805-810, 810-815, 815-820, 820-825, 825-830, 830-835, 835-840, 840-845, 845-850, 850-855, 855-860, 860-865, 865-870, 870-875, 875-880, 880-885, 885-890, 890-895, 895-900, 900-905, 905-910, 910-915, 915-920, 920-925, 925-930, 930-935, 935-940, 940-945, 945-950, 950-955, 955-960, 960-965, 965-970, 970-975, 975-980, 980-985, 985-990, 990-995, 995-1000, 1000-1005, 1005-1010, 1010-1015, 1015-1020, 1020-1025, 1025-1030, 1030-1035, 1035-1040, 1040-1045, 1045-1050, 1050-1055, 1055-1060, 1060-1065, 1065-1070, 1070-1075, 1075-1080, 1080-1085, 1085-1090, 1090-1095, 1095-1100, 1100-1105, 1105-1110, 1110-1115, 1115-1120, 1120-1125, 1125-1130, 1130-1135, 1135-1140, 1140-1145, 1145-1150, 1150-1155, 1155-1160, 1160-1165, 1165-1170, 1170-1175, 1175-1180, 1180-1185, 1185-1190, 1190-1195, 1195-1200, 1200-1205, 1205-1210, 1210-1215, 1215-1220, 1220-1225, 1225-1230, 1230-1235, 1235-1240, 1240-1245, 1245-1250, 1250-1255, 1255-1260, 1260-1265, 1265-1270, 1270-1275, 1275-1280, 1280-1285, 1285-1290, 1290-1295, 1295-1300, 1300-1305, 1305-1310, 1310-1315, 1315-1320, 1320-1325, 1325-1330, 1330-1335, 1335-1340, 1340-1345, 1345-1350, 1350-1355, 1355-1360, 1360-1365, 1365-1370, 1370-1375, 1375-1380, 1380-1385, 1385-1390, 1390-1395, 1395-1400, 1400-1405, 1405-1410, 1410-1415, 1415-1420, 1420-1425, 1425-1430, 1430-1435, 1435-1440, 1440-1445, 1445-1450, 1450-1455, 1455-1460, 1460-1465, 1465-1470, 1470-1475, 1475-1480, 1480-1485, 1485-1490, 1490-1495, 1495-1500, 1500-1505, 1505-1510, 1510-1515, 1515-1520, 1520-1525, 1525-1530, 1530-1535, 1535-1540, 1540-1545, 1545-1550, 1550-1555, 1555-1560, 1560-1565, 1565-1570, 1570-1575, 1575-1580, 1580-1585, 1585-1590, 1590-1595, 1595-1600, 1600-1605, 1605-1610, 1610-1615, 1615-1620, 1620-1625, 1625-1630, 1630-1635, 1635-1640, 1640-1645, 1645-1650, 1650-1655, 1655-1660, 1660-1665, 1665-1670, 1670-1675, 1675-1680, 1680-1685, 1685-1690, 1690-1695, 1695-1700, 1700-1705, 1705-1710, 1710-1715, 1715-1720, 1720-1725, 1725-1730, 1730-1735, 1735-1740, 1740-1745, 1745-1750, 1750-1755, 1755-1760, 1760-1765, 1765-1770, 1770-1775, 1775-1780, 1780-1785, 1785-1790, 1790-1795, 1795-1800, 1800-1805, 1805-1810, 1810-1815, 1815-1820, 1820-1825, 1825-1830, 1830-1835, 1835-1840, 1840-1845, 1845-1850, 1850-1855, 1855-1860, 1860-1865, 1865-1870, 1870-1875, 1875-1880, 1880-1885, 1885-1890, 1890-1895, 1895-1900, 1900-1905, 1905-1910, 1910-1915, 1915-1920, 1920-1925, 1925-1930, 1930-1935, 1935-1940, 1940-1945, 1945-1950, 1950-1955, 1955-1960, 1960-1965, 1965-1970, 1970-1975, 1975-1980, 1980-1985, 1985-1990, 1990-1995, 1995-2000, 2000-2005, 2005-2010, 2010-2015, 2015-2020, 2020-2025, 2025-2030, 2030-2035, 2035-2040, 2040-2045, 2045-2050, 2050-2055, 2055-2060, 2060-206

beak + wazel nut

Feb. 14/14

Corylus rostrata

[illegible]

Chicago by July 25, 1893 Caesys latirostris
Peripatus Ceryllus

Abundant in common stages
in willow Jefferson Highlands
N.H. July 1, 1895
W.S.P.

5 reversible pale yellow
OUT ventral scent glands
behind feet 6-10

SCENTED WILLOW SAW FLY ~~Nematodes~~

Willow Sawfly ~~Woods~~ Holl. July 8, 1893
gregarious edge cater, body whorls
without reversible ventral glands.

Egg Laid in masses on under side of leaf
on surface, not sawed at all, the dried
empty skin .8 x .4 mm in size

Stage hd 1.4 Hd well rounded, differs large
quadrate smooth, shiny black, the
structure below (as ocellus?)
Antennae 6, ocellus honey yellow. Body
normal for whorls, terminal segs.
somewhat smaller. The feet large, abd
on 6-11, 13 just, the last small; a black
anal plate with terminal pair of
spines. Segs 4-5 annulate, smooth
slightly shiny, the tubercles ^{S-V} ~~resolute~~
d but represented laterally by large
smooth rounded shiny black
prominence, much larger S-V.

| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----------|
| Cule | .34 | .48 | .69 | .98 | 1.4 | ratio .70 |
| Found | .3 | .5 | .7 | 1.0 | 1.4 | |

A d & s-d row of irregular edged, round
black spots, 4 per seg in straight era
line, not shiny like the s-v tubercles
Body light green, 2, 12, 13 post orange.
Venter orange tinted. The feet black
except at joints, abd. green
Stage hd 1.0 Same, black marks smaller

Went down without shed skin seen
(searched in com 1.4 mm) Coon beneath
ground, thin, elliptical, black, of
uniform texture not showing striae,
hymenoptera like. 6-7 x 2 1/2 - 4 mm
Stage Aug 4 8th hd. 3 round black as in
5.5 stage eating holes near eggs. Hd rounded
just as water black. Body held S-shaped
The feet blackish. Body annulate shiny green
ish yellow, pale, the 2 rows of s-v tubercles
visible, smoky, none seen dorsally anal
plate small, black

Molt Aug 5 (8th hd. 5.7) Hd 7 same black anal
plate & dark spines. Lat & s-v tubercles
blackish. S-d black spots faintly indicated
Scent very evident
Insects taken Jul 28 1893 Light green, 2, 12, 13
NEMATUS

Abundant in various stages

| | | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|-----|
| Cube. 23 | .55 | .71 | .91 | 1.2 | 1.6 | 2.1 | 2.9 |
| Found | .55 | .7 | .9 | 1.2 | 1.6 | 2.1 | 2.5 |

Prunus serotina, *Prunus maritima*

Wild cherry web sawflies, woods Holl July

Spiny dewy-beaded web among the leaves. Web thin, dew dries smaller

Some sh. hds 1.1 & 1.15 black; .7 dark brown

Eggs laid in a mass on back of leaf without saw cuts. Hides found, and one unhatched, elliptical, prob. white

^{Alt. 1.6 x 1.6 white}
yellowish / Length 1.2 mm, w. .4 mm

Sh. hd. .55 rather higher than wide, round smooth, suture very faint, but

clypeus apparently not quite as high as vertex, antennae very short, scarcely perceptible, in front of the large black ocellus. Color dark brown. Pale a faint

Sh. hd. .7 or .75? Clypeus Δ , very large but not attaining vertex. Small pointed

jointed antennae in front of ocellus

Color blackish brown, darker on sides

ant. .76 Just hatched June 15, 1896 Van Cortlandt Park N.Y. Hds .5 \pm . Hd blackish brown pale on face, anal bl. c. processes dusky. Body all whitish yellow, imbricate, slightly shiny. Sh. hd. .9? Much as before, but rather

dark and antennae more prominent

Sh. hd 1.2 Clypeus very large Δ , upper side pieces small, not reaching half way down, lower side piece large

bearing a 5-jointed pointed antennae before ocellus & a little above. Hd very shiny, black with brown shade.

mouth parts projecting. Hd smooth, clypeus slightly indented.

Stage hd 1.6 ^{large} Hd round, rather wider than high; clypeus large broad, $\frac{3}{4}$ to vertex

Antennae with large insertion before eye, 5-jointed, .5 mm long, terminal joint

pointed; labrum large, ^{color shiny black} palpi rather small distinctly pointed. Body slightly flattened

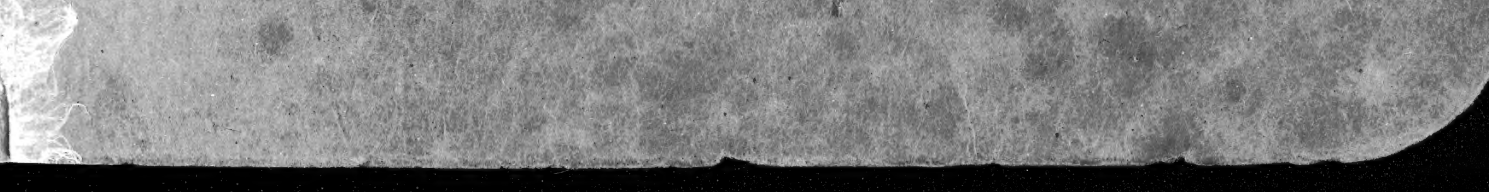
with distinct S-V folded ridge. Thor feet small, 4-jointed, pointed,

black, no larger than antennae

just hatched same day many hatched and, but stopped

[illegible]

1. 1st pair, subventral
 2. 2nd pair, subventral
 3. 3rd pair, subventral
 4. 4th pair, subventral
 5. 5th pair, subventral
 6. 6th pair, subventral
 7. 7th pair, subventral
 8. 8th pair, subventral
 9. 9th pair, subventral
 10. 10th pair, subventral
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 70. 70th pair, subventral
 71. 71st pair, subventral
 72. 72nd pair, subventral
 73. 73rd pair, subventral
 74. 74th pair, subventral
 75. 75th pair, subventral
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 80. 80th pair, subventral
 81. 81st pair, subventral
 82. 82nd pair, subventral
 83. 83rd pair, subventral
 84. 84th pair, subventral
 85. 85th pair, subventral
 86. 86th pair, subventral
 87. 87th pair, subventral
 88. 88th pair, subventral
 89. 89th pair, subventral
 90. 90th pair, subventral
 91. 91st pair, subventral
 92. 92nd pair, subventral
 93. 93rd pair, subventral
 94. 94th pair, subventral
 95. 95th pair, subventral
 96. 96th pair, subventral
 97. 97th pair, subventral
 98. 98th pair, subventral
 99. 99th pair, subventral
 100. 100th pair, subventral

This image shows a dark, textured horizontal strip, likely a book cover or endpaper. The material has a mottled, grainy appearance with various shades of gray and black. On the left side, there is a lighter, irregular edge that suggests a binding or a tear in the material. The overall texture is rough and uneven.

